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## ABSTRACT

A time sequence of recruitment activities was developed using high school data to represent the total, potential, and actual student markets for Pennsylvania State University. High schools with similar characteristics were grouped according to potential recruitment yields. Under the assumption that college decision-making behavior approximated the Kotler (1976) model, the results provided a generalized time sequence of recruitment activities and a series of individual high school strategies for the institution. Evaluation and modification of the resulting recruitment strategy packages should correspond with changes in the student environment. The general strategy guidelines are presented. The approach should be useful to others faced with the task of developing efficient and effective recruitment programs. The following materials are appended: rotated factor matrix; discriminant analysis with two functions; group descriptions; college selection paradigm based on study results; and maps showing the locations of the high schools and their group identifications. (Author/SW)

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**DEVELOPMENT OF A COMPREHENSIVE RECRUITMENT PROGRAM  
TARGETED AT THE PENN STATE STUDENT MARKET**

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DEVELOPMENT OF A COMPREHENSIVE RECRUITMENT PROGRAM  
TARGETED AT THE PENN STATE STUDENT MARKET

This paper proposes a more efficient approach for student recruitment. Individual high school data have been obtained to represent the total, potential, and actual Penn State markets. High schools with similar characteristics were grouped according to potential recruitment yields. Under the assumption that college decision making behavior approximated the Kotler (1976) model, the results provided a generalized time sequence of recruitment activities and a series of individual high school strategies for the institution. Evaluation and modification of these recruitment activities should correspond with changes in the student environment. This approach should be useful to others faced with developing efficient and effective recruitment programs.

### Pennsylvania High School Recruitment Outlook

The high school recruitment outlook for Pennsylvania is bleak. A total of 191,300 high school students graduated in the peak year of 1975, and there will be an estimated 23 percent decline in high school graduates over the next decade (Newton, 1975). Furthermore, the college attendance rate for high school graduates has been decreasing. In 1975, 43 percent of the high school graduates attended college and by 1985 the college attendance rate is predicted to be under 42 percent (Hummel, et al., 1978).

In 1978, with 185,200 high school graduates and a college attendance rate of 43 percent, there were approximately 78,000 potential college students in Pennsylvania. In 1985, with an estimated 147,300 high school graduates and an estimated attendance rate of 41 percent, the number of potential college students in Pennsylvania would be approximately 60,000. The bottom line for Penn State and other schools that draw heavily from within Pennsylvania is to minimize the effects of 18,000 fewer students, a figure roughly one and one-half times the size of Penn State's current number of enrolling freshmen.

### Penn State - One University Geographically Dispersed

Penn State maintains a multi-campus structure offering diverse academic and living environments. The main campus at University Park offers four years of all baccalaureate degree programs and all freshmen are required to live in residence halls. Seventeen Commonwealth Campuses offer selected associate degree programs and the first two years of most baccalaureate programs with students then transferring to University Park to complete their degrees. Most of the Commonwealth Campus students commute to school but some campuses have one or two residence halls. Behrend College offers selected associate programs, the first two years of most baccalaureate programs and four years of selected baccalaureate programs. Most students commute to Behrend even though there are some residence halls.

For the purpose of contacting high school students, Penn State has

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divided the Commonwealth of Pennsylvania into 19 areas, one for each campus that admits freshmen. Within its own service area, each campus has primary recruitment responsibilities and its representatives participate in a wide range of recruitment functions. These activities encompass high school visits, attendance at college nights and college fairs, interviews and counseling sessions with high school students and their parents, and the development of local publications that focus on a very distinct market of high school graduates. Campus representatives must be knowledgeable about and represent the entire University. They provide information about available programs at the local campus, specialized programs that exist at other campuses, and the general offerings of the total University.

#### Research Objectives

The primary objective of this study was to develop a time sequence of recruitment activities within a priority framework of high schools. We wanted to provide ways to answer the following basic questions:

Who should be contacted?

What information do students need?

When do they need this information?

Where are potential students located?

Why are high school market potentials important?

How are high school priorities established?

The result was the creation of a Penn State recruitment package that provided general strategy guidelines, yet remained flexible enough to be valuable in unusual situations in any part of the state. This recruitment package considered the available student markets within the Commonwealth Campus system, established high school priorities and provided a calendar of suggested recruitment strategies.

Two secondary objectives were necessary to provide inputs into the recruitment package. The first was to evaluate the total, potential and actual Penn State student markets at the individual high school level. These markets were

represented by the number of high school graduates, the number of Scholastic Aptitude Test (SAT) scores reported to Penn State and the number of applications submitted to Penn State from each high school. The second was to develop groups of high schools that shared marketing similarities. High school recruitment could continue on an individualized basis, but group identification provided a means of establishing priorities and recruitment efficiencies.

#### Scope of the Study

Only Pennsylvania high schools were included in this analysis. Out-of-state high schools were excluded because of data acquisition problems. Since Pennsylvania high schools provided over 90 percent of the Penn State student body, it followed that the analysis of recruitment activities should focus primarily on this segment. In addition, public high schools were included in the study while private high schools were not. As in the case of out-of-state high schools, difficulties in data acquisition for private high schools forced their exclusion. While this elimination affected certain parts of the state disproportionately, the fact that over 80 percent of the Pennsylvania high school graduates were from public high schools provided a very large sample for study. High school seniors who graduated in 1977, the most recent information available at the time of the study, formed the basis for this analysis.

#### Data Sources

Data on all public schools with secondary enrollments were obtained from the Pennsylvania Department of Education (1978). These data included the number of 1977 high school graduates and the number of graduates who continued on to college in the fall of 1977. Data on SAT reports were obtained from the College Entrance Examination Board (1978), and included the number of students from each high school who reported their scores to Penn State. Finally, data on the levels of student interest in Penn State were obtained from the internal admissions records. The information on these traditional students indicated the

stage each student had reached in the admissions process from rejection to enrollment. Provisional and other non-traditional students did not appear on the admissions records and were not part of the study population.

#### Analysis and Procedures

Four statistical analysis steps transformed the individual high schools into generalized types. Computer programs used included the Statistical Package for the Social Sciences (SPSS), (Nie, et al., 1975) and a numerical taxonomy procedure maintained at the Penn State Computation Center.

First, factor analysis was used to obtain a smaller number of independent factors from the original variables describing each high school. Second, a numerical taxonomy procedure established groups based upon the independent variables from the factor analysis. Third, a discriminant analysis determined the fewest number of variables necessary to describe each of the groups and re-evaluated group accuracy using this smaller set of variables. Fourth, descriptive statistics related to each of the discriminate functions then provided a description of each of the high school types using the original variables.

#### Factor Analysis

The principal components method of factor analysis was used to reduce the 28 variables that described each of the high schools to a smaller number of independent factors. Over 81 percent of the total variance was extracted by the first six principal components. These factors were interpreted in terms of the original variables using the rotated factor matrix (see Table 1).

Factor 1 (Interest) was associated with variables representing the numbers of high school graduates and their interest in Penn State. These variables were high school graduates, graduates continuing on to college, graduates continuing on to other postsecondary institutions, SAT reports sent to Penn State, applications to Penn State, Penn State admission offers declined, referrals to another campus location rejected, paid acceptances and cancellations of paid acceptances.

Factor 2 (Acceptances) represented the yield rates of the number of applications and paid acceptances as a proportion of the number of high school graduates, as well as the number of paid acceptances as a proportion of the number of SAT reports sent to Penn State.

Factor 3 (Not Accepted) included the yield rates of the number of applications not acceptable in terms of the numbers of high school graduates, SAT reports and applications.

Factor 4 (Referral/Rejections) contained the yield rates of the number of referrals rejected as a proportion of the numbers of high school graduates, SAT reports and applications.

Factor 5 (Decline) represented the yield rates of the number of admission offers declined in terms of the numbers of high school graduates, SAT reports and applications.

Factor 6 (Cancellations) contained the yield rates of the number of cancellations of paid acceptances based on the numbers of high school graduates, SAT reports and applications.

#### Numerical Taxonomy

The numerical taxonomy procedure was used to group individual high schools based upon the six factors generated from the completed factor analysis. This procedure was chosen to obtain a sequential clustering of high schools based upon their similarity on the factors. The sequence originated with the 597 high schools, grouped the most similar ones first, continued grouping other similar schools and eventually ended with one group containing all of the high schools. The analysis required evaluative judgment to establish a point within the grouping procedure such that the number of groups was not overwhelming, but the groups that did exist were meaningful. The point selected in the present analysis resulted in eight groups, five of them quite large. The development of these groups was important as a first step in establishing recruitment priorities for

individual high schools. It also served to provide a priori groups for the next analytical procedure.

#### Discriminant Analysis

The discriminant analysis procedure was used to further analyze the high school groups that resulted from the numerical taxonomy and attempted to define these groups with fewer than the six factors that resulted from the principal components analysis. When all six factors were included in the first discriminant analysis, four significant discriminant functions resulted. The first two discriminant functions explained the majority of the variance, over 87 percent, while the second two discriminant functions explained a total of three percent of the variance.

Each of the discriminant functions was then identified by its relationship to the factors using the standardized discriminant coefficients. The first discriminant function was identified with the interest factor; the second function corresponded to the referral/rejection factor; the third function was related to the acceptance factor; and the fourth function was identified with the not accepted and decline factors.

Classification results showed that a total of 83.5 percent of the predicted group assignments were the same as the actual group membership. For the individual groups, at least 72 percent were assigned correctly, with a high of over 90 percent assigned correctly for group 1.

The discriminant analysis was repeated with only the first two discriminant functions used in the analysis (see Table 2). The results were quite similar to the first discriminant analysis, with only a slight decrease in the total percentage of correct predicted group memberships, down about three percent to 80.2 percent. In this case the correct prediction rate ranged from a low of 69 percent to a high of 90 percent for group 1. Thus the discriminant analysis with only two functions was an acceptable means of determining the

most important variables that distinguished among the groups.

#### Descriptive Statistics

Descriptive Statistics were obtained for each of the eight high school groups based on the original set of variables related to the interest and referral/rejection factors (see Table 3). These statistics presented a profile of each of the high school groups developed with the numerical taxonomy procedure and validated by the discriminant analysis.

Group 1 high schools had a small number of graduates and had few students continuing on to college or to other postsecondary institutions. They showed a low SAT and application interest in Penn State and had few decline of offers or paid acceptances. There were few referral/rejections and there were low referral/rejection rates in terms of high school graduates, SAT reports and applications.

Group 2 high schools were very similar to the description of the group 1 high schools except that there were a high number of referral/rejections and a high referral/rejection rate when compared with the numbers of high school graduates, SAT reports and applications.

Group 3 high schools had a small number of graduates but a moderate number continuing on to college or to other postsecondary institutions. These high schools showed a moderate SAT and application interest in Penn State, and had moderate numbers of decline of offers and paid acceptances. There were few referral/rejections and cancellations of paid acceptances, and there were low referral/rejection rates in terms of high school graduates, SAT reports and applications.

Groups 4 and 5 had too few members to adequately describe them. They were very small high schools with virtually no interest in Penn State by any measure.

Group 6 high schools had very large numbers of graduates and a large number of graduates continuing on to college or other postsecondary institutions. These high schools had a very high SAT and application interest in Penn State and

had very high numbers of decline of offers and paid acceptances. There were a high number of cancellations of paid acceptances, a low number of referral/rejections and low referral/rejection rates in terms of high school graduates, SAT reports and applications.

Group 7 high schools had a large number of graduates and a large number continuing on to college and to other postsecondary institutions. They showed a high degree of SAT and application interest in Penn State, and had a large number of decline of offers and paid acceptances. There were a moderate number of cancellations of paid acceptances, a low number of referral/rejections and low referral/rejection rates in terms of high school graduates, SAT reports and applications.

Group 8 high schools had an extremely large number of graduates and an extremely large number continuing on to college or to other postsecondary institutions. These schools showed an extremely high SAT and application interest in Penn State. There were extremely high numbers of decline of offers, paid acceptances and cancellations of paid acceptances. There were low numbers of referral/rejections and low referral/rejection rates in terms of high school graduates, SAT reports and applications.

#### Components of a Recruitment Package

##### Model of College Selection

Research by Gilmour et. al. (1977) provided support for the model of the college selection process developed by Kotler (1976). In addition, a time dimension was added to the model as well (see Figure 1).

In the sophomore or junior year of high school, students generally decided whether or not to attend college. This choice was often closely related to decisions about high school curriculum and a career. While most students were aware of some colleges, at some point in the junior year they identified a period when they concentrated on developing a list of colleges. Often this effort

coincided with PSAT or SAT test dates or with a guidance session.

In the early part of the senior year, students decided on the colleges to which they would apply. Usually the number of applications would be half the number of schools that were seriously considered. Applications were then submitted to these schools throughout the fall of the senior year. Admissions decisions arrived in the winter or spring, and a final college choice was made shortly after all of the admissions decisions had been received.

#### High School Priorities

High schools can be assigned priorities for recruitment efforts based on yields and potential yields to Penn State. The generalized high school groups developed and described above make this an easy task. For example, the priority structure would have the extremely large high schools of group 8 as the highest priority; the very large high schools of group 6 as the second priority; the large high schools of group 7 as the third priority; the small but moderately interested high schools of group 3 as the fourth priority; the small high schools with low referral/rejection rates of group 1 as fifth priority; the small high schools with high referral/rejection rates of group 2 as sixth priority; and the extremely small high schools of groups 4 and 5 as seventh and eight priorities, respectively. This priority structure could be established at the state level to govern overall recruitment strategies, as well as at the Commonwealth Campus level to target specific schools for recruitment efforts. Priorities might be reassigned somewhat at the Commonwealth Campus level to reflect the presence or absence of various high school group members, or to account for special relationships between certain schools and the local campus.

#### Geographical Market Definition

Once the priority structure was established, the state and service area markets for high school students could be defined geographically. The distribution of high schools statewide and in Commonwealth Campus service areas

showed the relative location of high school types and their relationship to the campuses. The SYMAP (1976) computer graphics program was used to generate a map of the state of Pennsylvania showing locations of each of the high schools and a group identification (see Figure 2). An additional map has been developed for the University Park service area showing the locations and group memberships of the high schools for which this service area has responsibility (see Figure 3). The letters on both maps were abbreviations for Penn State Campuses and show their approximate locations within the state. For example, on Figure 2, UP represents University Park located in central Pennsylvania and BD represents Behrend College in northwestern Erie county. The numbers corresponded to high school locations within the state and identify the group memberships as well.

#### Time Sequence of Recruitment Activities

In reality, recruitment activities operated on a continuous basis with different efforts simultaneously applied to different high school student populations. However, for the sake of clarity these activities were separated into as many discrete segments as possible and tied to an academic calendar for the present discussion.

The recruitment package existed on two different planes: general strategy guidelines and specific Commonwealth Campus recruitment activities that implemented these strategies. This discussion will begin with an explanation of the general guidelines that are applicable throughout the system, and will then provide an example of a specific recruitment program based on the University Park service area.

#### General Strategy Guidelines

October and November:

1. Visit all high priority schools to encourage seniors to apply to Penn State; to suggest that juniors take the PSAT exams; and to suggest college to sophomores and help them plan academic programs.

2. Visit nearby middle priority schools to encourage seniors to apply to Penn State and to suggest that juniors take the PSAT exams.

January and February:

1. Contact all seniors accepted at Penn State and encourage them to enroll.
2. Invite seniors to informational sessions held on campus or at other locations in the service area.

March and April:

1. Visit all high and middle priority high schools to encourage juniors to take the SAT exams and to consider Penn State.
2. Contact all seniors accepted at Penn State and encourage them to enroll.
3. Contact all paid acceptance students to maintain their commitment to Penn State.
4. Contact decline of offer and referral/rejection students to try to re-establish a commitment to Penn State.
5. Visit low priority high schools to encourage juniors to take the SAT exams and to consider Penn State.

May and June:

1. Contact all juniors who submitted SAT scores to Penn State and encourage them to apply in the fall.
2. Contact all seniors accepted at Penn State and encourage them to enroll.
3. Contact all paid acceptance students to maintain their Penn State intention.

4. Contact all paid cancellation, decline of offer and referral/rejection students to see if Penn State can figure in any of their future plans.
5. Provide opportunities for students to visit the campus for information sessions.

July and August:

1. Prepare evaluation designs for ongoing recruitment efforts and plan methods of implementing the results in future efforts.
2. Prepare preliminary plans for the next recruitment program.

September:

1. Evaluate past recruitment efforts in terms of costs and student yields to Penn State.
2. Complete plans for the upcoming recruitment program.

University Park Recruitment Program

October and November:

1. Visit the large, high priority schools of groups 8 and 7 in the State College and Williamsport areas to encourage seniors to apply to Penn State. Applications should be handed out and information on specific academic programs and financial aid should be available. Juniors should be advised to take the PSAT exams. A general brochure on Penn State should be handed out and response cards requesting additional information should be available. Sophomores should be encouraged to attend college, and a pamphlet on the value of higher education and required high school programs for major areas of study should be provided.

2. Visit the middle priority schools of group 3 that are located in and between the State College and Williamsport areas to provide the same types of information to sophomores, juniors and seniors.

January and February:

1. Contact all seniors accepted at Penn State and encourage them to enroll. Names of administrators and faculty should be made available to these students for acquiring additional information.
2. Invite seniors to informational sessions held on campus. An additional session might be held in the Williamsport area, with a potential site considered in the southeastern part of the service area where no heavy recruitment efforts are scheduled.

March and April:

1. Visit the high and middle priority schools of groups 8, 7, and 3 between State College and Williamsport; the middle and low priority high schools of groups 3 and 1 north of Williamsport; the middle and low priority schools of groups 3, 2, and 1 south of Williamsport; and the low priority schools of group 1 from the south back to the State College area. Juniors should be encouraged to take the SAT exams and to consider applying to Penn State. An informational brochure and application to Penn State should be available.
2. Contact all seniors accepted at Penn State and encourage them to enroll. Letters might also be sent by faculty or department heads to provide students with additional information about their chosen area.
3. Contact all paid acceptance students to maintain their commitment to Penn State. They should be kept aware of events taking place on campus and upcoming dates for arrival and registration.

4. Contact decline of offer and referral/rejection students to try to re-establish an interest in Penn State. This might include providing information about opportunities at other campuses in the system as well as non-traditional programs that might fit the students' current needs.

May and June:

1. through 4. Make contacts with the juniors and seniors in the same manner as in the general guidelines. Applications should be available for the juniors and the emphasis on seniors should be to reaffirm or to re-establish a commitment to Penn State.
5. Provide opportunities for students to visit the campus for information sessions. Additional information sessions could be set up in the Williamsport area and in the southeastern part of the service area.

July and August:

1. Prepare an evaluation design for the recruitment program.
2. Develop preliminary plans for the next recruitment program.  
This should include alternatives to expand, contract or change the emphasis of visits and contacts based on results of the evaluation.

September:

1. Evaluate enrollment yields in the State College, Williamsport, northern and southern sections of the service areas in terms of SAT reports, applications and acceptances.
2. Complete recruitment plans for the coming year based on the evaluation results. Plan tests of new strategies at selected schools or in selected areas to be able to measure the results in the next evaluation.

### Summary

A generalized Pennsylvania and specific University Park service area recruitment plan has been developed for the Penn State University system. Data on high schools and their students' interest in Penn State have been transformed into a series of high school groups. Recruitment priorities were associated with these high school groups based on their profiles and locations were then mapped for Pennsylvania and University Park. A modified Kotler decision-making model was then described. The combination of this decision-making model, the high school groups, their recruitment priorities and their location within Pennsylvania and the University Park service area resulted in the recruitment packages that served as a first step in an ongoing, evolving process.

Table 1: Rotated Factor Matrix (Values Greater Than .70) - 17 -

| Variable                         | 1   | 2   | 3   | 4   | 5   | 6   |
|----------------------------------|-----|-----|-----|-----|-----|-----|
| H.S. Graduates                   | .92 |     |     |     |     |     |
| Graduates to college             | .93 |     |     |     |     |     |
| Graduates to other postsecondary | .74 |     |     |     |     |     |
| SAT reports to PSU               | .94 |     |     |     |     |     |
| Applications to PSU              | .91 |     |     |     |     |     |
| Not accepted at PSU              |     |     |     |     |     |     |
| Declined an offer at PSU         | .86 |     |     |     |     |     |
| Referral/rejection at PSU        | .72 |     |     |     |     |     |
| Paid accepts at PSU              | .84 |     |     |     |     |     |
| Paid cancel at PSU               | .77 |     |     |     |     |     |
| SAT reports/graduates            |     |     |     |     |     |     |
| Applications/graduates           |     | .72 |     |     |     |     |
| Not accepted/graduates           |     |     | .89 |     |     |     |
| Declined offer/graduates         |     |     |     |     | .76 |     |
| Referral/rejection/graduates     |     |     |     | .93 |     |     |
| Paid accept/graduates            |     | .91 |     |     |     |     |
| Paid cancel/graduates            |     |     |     |     |     | .82 |
| Applications/SAT reports         |     |     |     |     |     |     |
| Not accepted/SAT reports         |     |     | .95 |     |     |     |
| Declined offer/SAT reports       |     |     |     |     | .89 |     |
| Referral/rejection/SAT reports   |     |     |     | .96 |     |     |
| Paid accept/SAT reports          |     | .78 |     |     |     |     |
| Paid cancel/SAT reports          |     |     |     |     |     | .95 |
| Not accepted/applications        |     |     | .92 |     |     |     |
| Declined offer/applications      |     |     |     |     | .88 |     |
| Referral/rejection/applications  |     |     |     | .96 |     |     |
| Paid accept/applications         |     |     |     |     |     |     |
| Paid cancel/applications         |     |     |     |     |     | .89 |

Table 2: Discriminant Analysis With Two Functions

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Summary of Functions

| <u>Function</u> | <u>Eigenvalue</u> | <u>Percent of Variance</u> |
|-----------------|-------------------|----------------------------|
| 1               | 5.018             | 87.22                      |
| 2               | 0.55              | 9.53                       |

Standardized Coefficients

| <u>Factor</u>          | <u>Discriminant</u> | <u>Function</u> |
|------------------------|---------------------|-----------------|
|                        | 1                   | 2               |
| 1 (Interest)           | -0.80               |                 |
| 2 (Acceptance)         |                     |                 |
| 3 (Not Accepted)       |                     |                 |
| 4 (Referral/Rejection) |                     | -0.94           |
| 5 (Decline)            |                     |                 |
| 6 (Cancellations)      |                     |                 |

Classification Results - Percentages

| <u>Cases</u> | <u>Actual</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>6</u> | <u>7</u> |
|--------------|---------------|----------|----------|----------|----------|----------|
| 256          | 1             | 89.8     | 2.3      | 7.8      | 0.0      | 0.0      |
| 32           | 2             | 6.3      | 68.8     | 25.0     | 0.0      | 0.0      |
| 158          | 3             | 23.4     | 0.0      | 70.3     | 0.0      | 6.3      |
| 55           | 6             | 0.0      | 0.0      | 0.0      | 74.5     | 25.5     |
| 86           | 7             | 0.0      | 1.2      | 17.4     | 3.5      | 77.9     |

Total - 80.2% of group memberships correctly predicted

Table 3: Group Descriptions (Mean Values)

| Variable                            | Group |     |     |    |     |     |     |     |
|-------------------------------------|-------|-----|-----|----|-----|-----|-----|-----|
|                                     | 1     | 2   | 3   | 4  | 5   | 6   | 7   | 8   |
| High school graduates               | 190   | 183 | 219 | 90 | 22  | 526 | 374 | 714 |
| Graduates to college                | 55    | 73  | 81  | 30 | 7   | 286 | 174 | 471 |
| Graduates to other postsecondary    | 13    | 12  | 15  | 5  | 0   | 30  | 25  | 35  |
| SAT reports                         | 25    | 33  | 43  | 7  | 3   | 152 | 84  | 284 |
| Applications                        | 11    | 15  | 22  | 1  | 2   | 86  | 43  | 162 |
| Not accepted                        | 0     | 1   | 1   | 0  | 0   | 5   | 2   | 7   |
| Declined offer                      | 3     | 3   | 5   | 0  | 0   | 26  | 13  | 52  |
| Referral/rejection                  | 1     | 3   | 1   | 0  | 2   | 6   | 3   | 11  |
| Paid accept                         | 5     | 6   | 13  | 0  | 0   | 38  | 20  | 65  |
| Paid cancel                         | 1     | 1   | 1   | 1  | 0   | 6   | 3   | 17  |
| Referral/rejection/graduates (%)    | 0     | 2   | 0   | 0  | 9   | 1   | 1   | 1   |
| Referral/rejection/SAT reports (%)  | 2     | 11  | 2   | 0  | 67  | 4   | 3   | 4   |
| Referral/rejection/applications (%) | 4     | 22  | 4   | 0  | 100 | 7   | 6   | 7   |
| Number of cases                     | 256   | 32  | 158 | 2  | 1   | 55  | 86  | 7   |

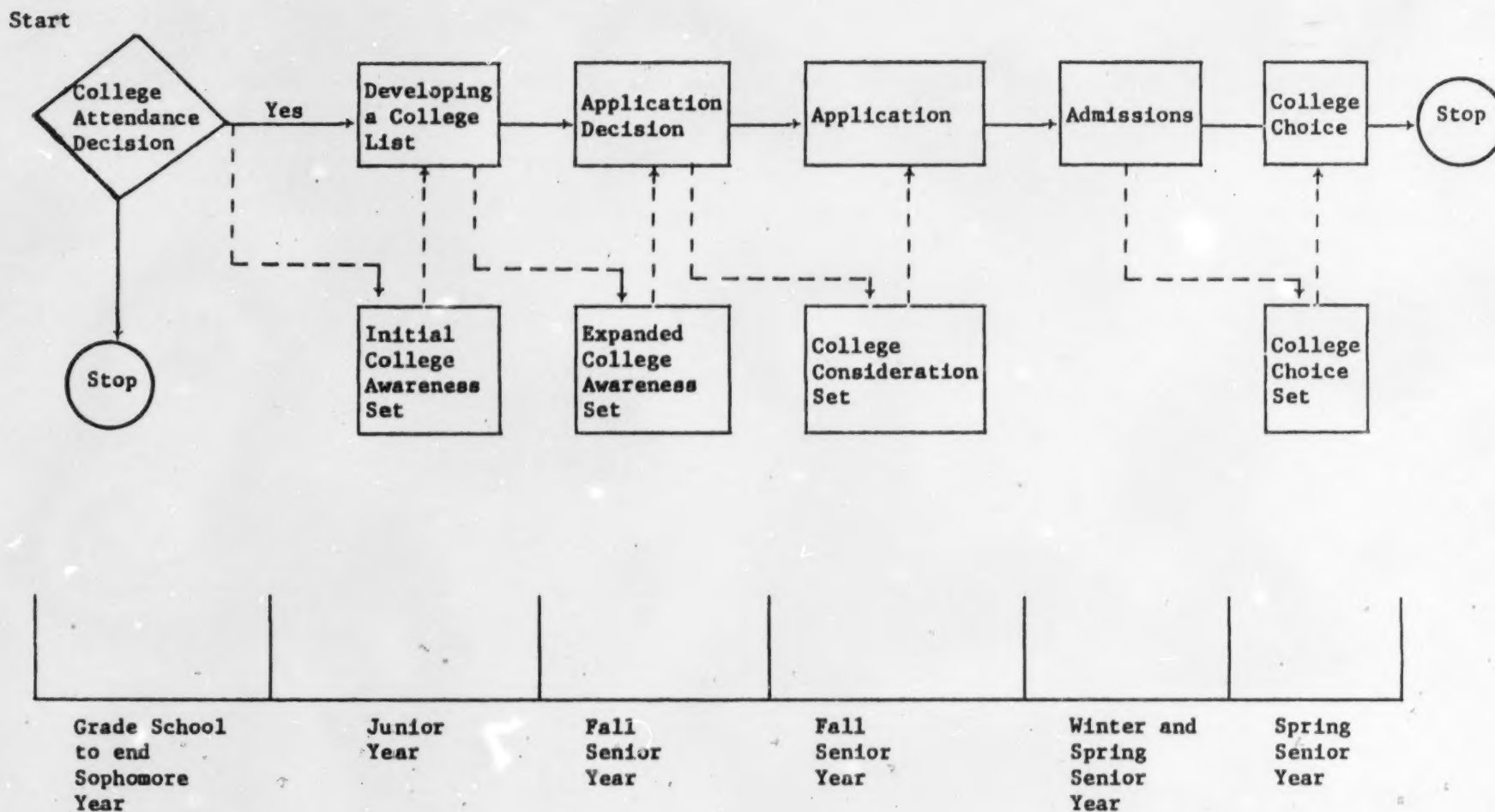


Figure 1: College Selection Paradigm Based on Study Results

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Figure 3 : University Park High School Groups

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